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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,046	02/19/2004	Markus Henneken	ZAHFRI P441USDI	5737
20210	7590	08/10/2005	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151				PANG, ROGER L
		ART UNIT		PAPER NUMBER
		3681		

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/782,046	HENNEKEN ET AL.
	Examiner Roger L. Pang	Art Unit 3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 9-20 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 9-20 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 February 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 10/129,223.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-19 & 5-10-04.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

DETAILED ACTION

The following action is in response to application 10/782,046 filed on February 19, 2004.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 12-16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 3, line 1: "gar" should be replaced with --gear--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With regard to claim 12, it is never stated when the absolute kick-down switching characteristic line for the determination of

the kick-down upshift point should be used, nor is there any sufficient detail that would distinguish the difference the absolute and the varying upshift point. With regard to claim 16, using stored characteristic lines is not “recalculating.” Also, applicant discloses using stored driver type characteristic lines, but never disclosed how these are used in conjunction with the modified upshift points.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 9, on line 3, the limitation of “the load conditions” lacks antecedent basis. Also, the limitation of “upswitch” on line 2 should be replaced with --upshift--. On line 3, the limitation of “road inclination” is not accurate. The upshift point is not a “function” of road inclination, b/c road inclination is never a measured variable. Acceleration of the vehicle, which may or may not yield a gradient trend (uphill or downhill) is used instead. It is suggested that applicant use claim language that may clearly distinguish the relationship of acceleration with slope, or just use acceleration. With regard to claim 10, on lines 2-3, the limitation of “the output speed gradient” lacks antecedent basis. With regard to claim 11, on lines 2-3, the limitation of “the transmission control system” lacks antecedent basis. Also, the limitation of “is stored” on line 2 should be removed, as it is redundant. With regard to claim 13, the problem with “upswitch” occurs again on line 2. Also, the limitation of “the target gear” (lines 1-2), and “the delay times” (line 4) lack antecedent basis. With regard to claim 14, the limitations of “the existing driver behavior,” “the upshift speed” and “the driver’s way of

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driving" lack antecedent basis. Also, given dependent claims 15 and 16, it is unclear what the definition of "recalculating" is (i.e. a previous answer is modified again or superceded with another function?). With regard to claim 15, the limitation of "the characteristic line" lacks antecedent basis. Also, this "characteristic line" appears to be the same limitation as the value of the speed offset (see claim 14). Perhaps a more accurate description would be "a characteristic line of the speed offset values?"

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 9-11, 13-15, and 17-20 are rejected under the judicially created doctrine of double patenting over claims 1-2, and 5-6 of U. S. Patent No. 6,773,373 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: claim 1 of '373 covers claims 9-10, 17, and 19 of the present application; claim 2 of

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‘373 covers claims 11, 18, and 20 of the present application; claim 5 covers claim 13 of the present application, and claim 6 covers claims 14-15 of the present application.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Koenig. With regard to claim 9, Koenig teaches a method for kick-down upshift speed optimization in a motor vehicle with an automatic transmission 14, comprising determining each kick-down upshift point as a function of load conditions DESRPM and acceleration ACCEL. With regard to claim 10, Koenig teaches the method, comprising adding a speed offset of appropriate sign (ACCEL * DTME) to the current upshift point as a function of an output speed gradient (ACCEL when a kick-down condition is recognized by a transmission control system of the transmission. With regard to claim 11, Koenig teaches the method, comprising storing the variation of the speed offset of appropriate sign in the transmission control system 190 in the form of a characteristic line, a separate characteristic line being stored for each upshift (Fig. 4; Fig. 3a). With regard to claim

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12, Koenig teaches the method, comprising using an absolute kick-down switching characteristic line for determination of the kick-down upshift point (Fig. 2). With regard to claim 13, Koenig teaches the method, comprising determining the target gear for the next upshift when a kick-down condition is recognized and determining the transmission output speed gradient ACCEL and then calculating the speed offset (CACCEL * DTME), the delay times for individual gear changes being stored for application with temperature-dependent delay times being taken into account (Fig. 4; Fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tinschert. With regard to claim 17, Tinschert teaches a method of kick-down upshift speed optimization in a motor vehicle with an automatic transmission as a function of road inclination, comprising the steps of: determining an output speed gradient reflecting a road inclination (Fig. 11), determining a speed offset ddkw, dependent upon the output speed gradient, such that an engine will reach a high engine output speed at an upshift point (Col. 8. lines 57-58). Tinschert lacks the specific teaching of using the maximum engine output speed as an upshift point. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tinschert to employ a maximum engine speed as the upshift point, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or

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workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. With regard to claim 18 and 20, Tinschert teaches the method, further comprising the step of further determining the output speed gradient and the speed offset based upon a vehicle load condition which is derived from one of a corresponding curve and value stored in a transmission control system (Fig. 11). With regard to claim 19, see rejection to claim 17 above, and Tinschert teaches altering the upshift speed according to the speed offset so that the upshift occurs at a time the engine output speed reaches the maximum engine output speed.

Allowable Subject Matter

Claim 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nitz, Dobler and Carlson have been cited to show similar upshift modifications.

Iizuka and Sauer have been cited to show shifting at maximum engine speeds.

This is a divisional of applicant's earlier Application No. 10/129,223. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Please Note: claims 9-16 are identical to claims 9-16 of the cited prior application. Also, claims 17-20 are identical to claims 23-26 of the cited prior application.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L Pang
Primary Examiner
Art Unit 3681

August 5, 2005